

References supporting Subpart J NPRM

Tulis, Dana S., EPA Chair and Caplis, Captain John, USCG Vice-Chair, National Response Team, "Use of Dispersants on Oil Spills – Interim Actions," Memorandum to NRT Members and RRT Co-Chairs; December 16, 2010.

Stanislaus, Mathy; Assistant Administrator, OSWER EPA; "Revision of Area Contingency Plans/Regional Contingency Plans Regarding Use of Dispersants on Oil Spills – Interim Actions;" Memorandum to EPA Regional Administrators, November 2, 2010.

http://www.epaosc.org/sites/5083/files/rrt6_nearshore_dispersant_eap_031605.pdf

<http://www.restorethegulf.gov/release/2011/08/19/operations-and-ongoing-response-august-17-2011>

<http://www.epa.gov/oppt/existingchemicals/pubs/actionplans/np-npe.html>

<http://www.epa.gov/endo/pubs/edspoview/index.htm>

<http://www.epa.gov/endo/pubs/edspoview/background.htm>

<http://www.epa.gov/endo/pubs/assayvalidation/index.htm>

http://marinewellcontainment.com/expanded_system.php

NRC, (2005), Oil Spill Dispersants: Efficacy and Effects, The National Academies Press, pp. 138,
http://www.nap.edu/catalog.php?record_id=11283

http://www.epa.gov/quality/qa_docs.html

<http://www2.epa.gov/region8/environmental-sampling>

Li, M. and Garrett, C., (1998) The Relationship Between Oil Droplet Size and Upper Ocean Turbulence, Mar. Poll. Bull., Vol. 36, pp. 961-970.

Li, Z., Lee, K., King, T., Boufadel, M.C., Venosa, A.D., (2008) Assessment of Chemical Dispersant Effectiveness in a Wave Tank under Regular Non-Breaking and Breaking Wave Conditions, Mar Pollut Bull, Vol. 56, pp. 903–912.

Li, Z., Lee, K., King, T., Boufadel, M.C., Venosa, A.D., (2009) Evaluating Chemical Dispersant Efficacy in an Experimental Wave Tank: 2 - Significant Factors Determining In Situ Oil Droplet Size Distribution, Env Eng Scien, Vol. 26, pp 1407-1418

Henry, C.B., Roberts, P.O., Overton, E.B., A Primer on In Situ Fluorometry to Monitor Dispersed Oil, IOSC 1999;246

Coble, P.G., (2007) Marine Optical Biogeochemistry: The Chemistry of Ocean Color, Chem. Rev., Vol. 107, pp. 402-418.

Bugden, J.B.C., Yeung, C.W., Kepkay, P.E., Lee, K. (2008) Application of Ultraviolet Fluorometry and Excitation–Emission Matrix Spectroscopy (EEMS) to Fingerprint Oil and Chemically Dispersed Oil in Seawater, Mar Pollut Bull, Vol. 56, pp. 677–685.

Conmy, R.N., Coble, P.G., Farr, J., Wood, A.M., Lee, K., Pegau, W.S., Walsh, I.D., Koch, C.R., Abercrombie, M.I., Miles, M.S., Lewis, M.R., Ryan, S.A., Robinson, B.J., King, T.L., Kelble, C.R., and Lacoste, J. (2014) Submersible Optical Sensors Exposed to Chemically Dispersed Crude Oil: Wave Tank Simulations for Improved Oil Spill Monitoring, Environ Sci Technol, Vol. 48, pp. 1803–1810.

Bugden, J.B.C., Yeung, C.W., Kepkay, P.E., Lee, K. (2008) Application of Ultraviolet Fluorometry and Excitation–Emission Matrix Spectroscopy (EEMS) to Fingerprint Oil and Chemically Dispersed Oil in Seawater, Mar Pollut Bull, Vol. 56, pp. 677–685.

Kepkay, P.E., Yeung, C.W., Bugden, J.C.B., Li, Z., and Lee, K. (2008) Ultraviolet Fluorescence Spectroscopy (UVFS): A New Means of Determining the Effect of Chemical Dispersants on Oil Spills, IOSC, pp. 639 – 644. <http://ioscproceedings.org/doi/abs/10.7901/2169-3358-2008-1-639>

Barwise, A. J. G. and Whitehead, E. V. (1980). Separation and Structure of Petroporphyrins. In: Advances in Organic Geochemistry 1979. (A. G. Douglas and J. R. Maxwell, eds.), Pergamon, New York, pp. 181–92.

Barwise, A. J. G. (1990). Role of Nickel and Vanadium in Petroleum Classification. Energy & Fuels, 4, 647–52

All, M.F., Bukharl, A., and Saleem, M., (1983) Trace Metals in Crude Oils from Saudi Arabia, Ind. Eng. Chem. Prod. Res. Dev. 1983, Vol 22, pp. 691-694.

<http://water.epa.gov/type/rsl/monitoring/vms55.cfm>

<http://www.epa.gov/emap/nca/>

Barron, M.G., Hemmer, M.J., and Jackson, C.R., (2013) Development of Aquatic Toxicity Benchmarks for Oil Products Using Species Sensitivity Distributions, Integr Environ Assess Manag, Vol 9, pp.610–615.

Aldenberg, T. and Jaworska, J.S., (2002) Uncertainty of the Hazardous Concentration and Fraction Affected for Normal Species Sensitivity Distributions, Ecotox and Environ Safety, Vol. 46, pp. 1-18.

Barron, M.G., and Wharton, S., (2005) Survey of Methodologies for Developing Media Screening Values for Ecological Risk Assessment, Integrated Environmental Assessment and Management, Vol. 1, pp. 320–332

<http://www.epa.gov/dfe/>

<http://www.epa.gov/oem/docs/oil/ncp/notebook.pdf>

Venosa, Albert D., National Risk Management Research Laboratory, US EPA; Sorial, George A., Department of Civil & Environmental Engineering, University of Cincinnati; King, Dennis W., Statking

Consulting; Round-Robin Testing of a New EPA Dispersant Effectiveness Protocol, International Oil Spill Conference, 2001.

Venosa, A. D., D. W. King, and G. A. Sorial. 2002. The Baffled Flask Test for Dispersant Effectiveness: A Round Robin Evaluation of Reproducibility and Repeatability. *Spill Sci. & Technol. Bulletin* 7(5-6):299-308.

Sorial, G. A., A. D. Venosa, K. M. Miller, E. Holder, and D. W. King. 2004a. Oil Spill Dispersant Effectiveness Protocol - Part I Impact of Operational Variables. *ASCE J. Env. Eng. Div.*, 130(10):1073-1084.

Sorial, G. A., A. D. Venosa, K. M. Miller, E. Holder, and D. W. King. 2004b. Oil Spill Dispersant Effectiveness Protocol - Part II Performance of the Revised Protocol. *ASCE ASCE J. Env. Eng. Div.*, 130(10):1085-1093.

USEPA 2002a Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth edition. (Acute Methods Manual), Office of Water, Cincinnati, OH. EPA-821-R-02-012.

USEPA 2002b. Short-term Methods for Estimating the Chronic toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third Edition. (Saltwater Chronic Methods manual). Office of Water, Cincinnati, OH. EPA-821-R-02-014.

http://www.epa.gov/oppefed1/ecorisk_ders/toera_analysis_eco.htm#Ecotox

Aurand, D. and G. Coelho (Editors). 2005. Cooperative Aquatic Toxicity Testing of Dispersed Oil and the "Chemical Response to Oil Spills: Ecological Effects Research Forum (CROSERF)." Ecosystem Management & Associates, Inc. Lusby, MD. Technical Report 07-03.

Barron, MG, Ka'aihue L. 2003. Critical evaluation of CROSERF test methods for oil dispersant toxicity testing under subarctic conditions. *Mar Pollut Bull* 46:1191-1199.

Hemmer, MJ, Barron, MG, Greene, R. 2011. Comparative toxicity of eight oil dispersants, Louisiana sweet crude oil (LSC) and chemically dispersed LSC to two aquatic species. *Environ Toxicol Chem*, 30: 2244–2252

USEPA 2002a Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, Fifth edition. (Acute Methods Manual), Office of Water, Cincinnati, OH. EPA-821-R-02-012.

USEPA 2002b. Short-term Methods for Estimating the Chronic toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third Edition. (Saltwater Chronic Methods manual). Office of Water, Cincinnati, OH. EPA-821-R-02-014.

USEPA 1996. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms. EPA/600/R-95/136

USEPA 2002b. Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third Edition. (Saltwater Chronic Methods manual). Office of Water, Cincinnati, OH. EPA-821-R-02-014.

Fingas, M., (Ed.), 2011, Oil Spill Science and Technology, Gulf Professional Publishing, pp 513-518

Karen Miller Koran, Pegasus Technical Services, Inc., 46 E. Hollister Street, Cincinnati, OH 45219; Albert D. Venosa, US Environmental Protection Agency, 26 W. Martin Luther King Drive, Cincinnati, OH 45268,*; Christopher C. Luedeker, Keith Dunnigan StatKing Consulting, Inc., 759 Wessel Drive, Suite 6, Fairfield, Ohio 45014; George A. Sorial, University of Cincinnati, P.O. Box 210071, Cincinnati, OH 45221-0071. Marine Pollution Bulletin journal homepage: www.elsevier.com/locate/marpolbul

ASTM Standard Test Method for Evaluating the Effectiveness of Cleaning Agents. Designation: G122 – 96 (Reapproved 2008). ASTM International, 100 Barr Harbour Dr., PO box C-700 West Conshohocken, Pennsylvania 19428-2959, United States

Fingas, Merv and Fieldhouse, Ben; “Surface-washing Agents or Beach Cleaners” (2010). Chapter 21 Surface-Washing Agents or Beach Cleaners. In Oil Spill Science and Technology (p716). London: Gulf Professional Publishing.

http://water.epa.gov/scitech/methods/cwa/wet/upload/2007_07_10_methods_wet_disk2_atx1-6.pdf

Haines, J.R., E.J. Kleiner, K.A. McClellan, K.M. Koran, E.L. Holder, D.W. King, and A.D. Venosa. 2005. “Laboratory evaluation of oil spill bioremediation products in salt and freshwater systems.” J. Ind. Microbiol. Biotechnol. 32:171-185.

Blenkinsopp, S, G Sergy, Z Wang, MF Fingas, J Foght and DWS Westlake. 1995. Oil spill bioremediation agents-Canadian efficacy test protocols. Proceedings of the 1995 International Oil Spill Conference, Feb 27-March 2, Long Beach, CA. American Petroleum Institute, Washington, DC. pp. 91-96.

USEPA 2010. http://www.epa.gov/oppefed1/ecorisk_ders/toera_analysis_eco.htm#Ecotox.

Buist, I., Potter, S., Nedwed, T., (2011) Herding Agents to Thicken Oil Spills in Drift Ice for In Situ Burning: New Developments, IOSC, <http://ioscproceedings.org/doi/abs/10.7901/2169-3358-2011-1-230>

Buist, I., Nedwed, T., (2011) Using Herders for Rapid In Situ Burning Of Oil Spills on Open Water, IOSC, <http://ioscproceedings.org/doi/abs/10.7901/2169-3358-2011-1-231>

U.S. Environmental Protection Agency (1994), “Swirling Flask Dispersant Effectiveness Test,” Title 40 Code of Federal Regulations, Pt. 300, Appendix C, pp 47458-47461.

Sorial, G.A., A.D. Venosa, K.M. Koran, E. Holder, and D.W. King. 2004. “Oil spill dispersant effectiveness protocol: I. Impact of operational variables.” ASCE J. Env. Eng. 130(10):1073-1084.

Sorial, G.A., A.D. Venosa, K.M. Koran, E. Holder, and D.W. King. 2004. “Oil spill dispersant effectiveness protocol: II. Performance of revised protocol.” ASCE J. Env. Eng. 130(10):1085-1093.

Venosa, A.D., D.W. King, and G.A. Sorial. 2002. "The baffled flask test for dispersant effectiveness: a round robin evaluation of reproducibility and repeatability." *Spill Sci. & Technol. Bulletin* 7(5-6):299-308.

Spotte, S., G. Adams, and P.M. Bubucis. 1984. "GP2 medium is an synthetic seawater for culture or maintenance of marine organisms," *Zoo Biol*, 3:229-240

Grubbs, F. 1969. "Sample Criteria for Testing Outlying Observations," *Annals of Mathematical Statistics*, pp. 27-58.

U.S. EPA. 2002. Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms. Fifth Edition. U.S. Environmental Protection Agency, Washington, DC (EPA-821-R-02-012).

U.S. EPA. 1995. Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms. First Edition. U.S. Environmental Protection Agency, Washington, DC (EPA/600/R-95-136)

U.S. EPA. 2002. Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms U.S. Environmental Protection Agency, Washington, DC (EPA-821-R-02-014).

U.S. EPA. 2008. Test Methods for Evaluating Solid Waste, Physical/Chemical Methods U.S. Environmental Protection Agency, Washington, DC (SW-846)

<http://www.epa.gov/osw/hazard/testmethods/sw846/online/index.htm>